

## Material Safety Data Sheet


### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

<b>Material Name</b>	Lubrication RFL 1
<b>Uses</b>	Roll Forming Lubricant
<b>Product Code</b>	LUBE-VIGGENRFL1 -L
<b>Manufacturer/Supplier</b>	<b>Lubrication Limited</b> Lubricant Distribution Centre Unit 3, Snibston Drive Coalville Leicestershire LE67 3NQ United Kingdom
<b>Telephone</b>	+44 (0) 1530 833899
<b>Fax</b>	+44 (0) 1530 813460
<b>Emergency Telephone</b>	+44 (0) 1530 833899
<b>Email</b>	technical@lubrication.net

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Substances Presents a Health Hazard	EC No.	CAS No.	Content	Symbol(s)	R-Phrases
Hydrocarbons, C11-C12, isoalkanes, < 2% aromatics	918-167-1		50% – 100%	Xn	R65, R66

### 3. HAZARDS IDENTIFICATION

<b>EC No.</b>	918-167-1
<b>Label In Accordance With (EC) No.</b>	1272/2008
	
<b>Signal Word</b>	Danger
<b>Hazard Statements</b>	H304 – May be fatal if swallowed and enters airways
<b>Supplementary Precautionary Statements</b>	P301+310 – IF SWALLOWED: Immediately call a POISON CENTRE or DOCTOR/PHYSICIAN. P331 Do NOT induce vomiting.
<b>Supplemental label information</b>	EUH066 – Repeated exposure may cause skin dryness or cracking.
<b>Health Effects</b>	May be fatal if swallowed and enters airways.
<b>Environmental Impact</b>	

### 4. FIRST AND MEASURES

<b>Inhalation</b>	Move the exposed person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.
<b>Skin Contact</b>	Remove affected person from source of contamination. Remove contaminated clothing. Get

## Material Safety Data Sheet

	medical attention if any discomfort continues.
<b>Eye Contact</b>	Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention if any discomfort continues.
<b>Ingestion</b>	NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Rinse mouth thoroughly. DO NOT induce vomiting. Get medical attention immediately.
<b>Advice to Physician</b>	No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

### 5. FIRE FIGHTING MEASURES

Clear fire area of all non-emergency personnel.

<b>Suitable Extinguishing Media</b>	Use dry chemical, CO <sub>2</sub> , alcohol-resistant foam or water spray (fog).
<b>Unsuitable Extinguishing Media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Protective Equipment for Firefighters</b>	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
<b>Hazards from the Substance or Mixture</b>	In a fire or if heated, a pressure increase will occur and the container may burst
<b>Hazardous Thermal Decomposition Products</b>	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides

### 6. ACCIDENTAL RELEASE MEASURES

Avoid contact with spilled or released material. For guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. See Chapter 13 for information on disposal. Observe the relevant local and international regulations.

<b>Protective Measures – For Non-Emergency Personnel</b>	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
<b>Protective Measures – For Emergency Responders</b>	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also Section 8 for additional information on hygiene measures.
<b>Clean Up Method – Small Spill</b>	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an

## Material Safety Data Sheet

	appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
<b>Clean Up Method – Large Spill</b>	Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.
<b>Additional Advice</b>	

### 7. HANDLING AND STORAGE

<b>General Precautions</b>	Put on appropriate personal protective equipment (see Chapter 8).
<b>Handling</b>	
<b>Storage</b>	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Chapter 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.
<b>Product Transfer</b>	
<b>Recommended Materials</b>	
<b>Unsuitable Materials</b>	
<b>Additional Information</b>	

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

If the American Conference of Governmental Industrial Hygienists (ACGIH) value is provided on this document, it is provided for information only.

#### Biological Exposure Index (BEI) – See reference for full details

No biological limit allocated.

<b>Exposure Controls</b>	No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.
<b>Hygiene Measures</b>	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that

## Material Safety Data Sheet

	eyewash stations and safety showers are close to the workstation location.
<b>Respiratory Protection</b>	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Recommended: Boiling point > 65 °C: A1; Boiling point < 65 °C: AX1; Hot material: A1P2.
<b>Hand Protection</b>	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Wear suitable gloves tested to EN374. Recommended: Nitrile gloves.
<b>Eye Protection</b>	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with sideshields.
<b>Body Protection</b>	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
<b>Environmental Exposure Controls</b>	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Clear colourless liquid
<b>Odour</b>	Hydrocarbon
<b>pH</b>	Not available.
<b>Initial Boiling Point and Boiling Range</b>	180°C - 196°C
<b>Pour Point</b>	Not available.
<b>Flash Point</b>	>62°C
<b>Upper/Lower Flammability or Explosion Limits</b>	Lower: 0.6% Upper: 6.5%
<b>Auto-Ignition Temperature</b>	>230°C
<b>Vapour Pressure</b>	0.1 kPa
<b>Specific Gravity</b>	0.763
<b>Density</b>	763 kg / m <sup>3</sup>
<b>Water Solubility</b>	Water: Immiscible Organic Solvents: Miscible
<b>Kinematic Viscosity</b>	1.2 mm <sup>2</sup> / s (cSt)
<b>Vapour Density (air = 1)</b>	Not available.
<b>Evaporation Rate (nBuAc = 1)</b>	Not available.

## Material Safety Data Sheet

### 10. STABILITY AND REACTIVITY

<b>Stability</b>	The product is stable.
<b>Conditions to Avoid</b>	Avoid heat, flames, and other source of ignition.
<b>Materials to Avoid</b>	Strong oxidizing materials. Will not polymerize.
<b>Hazardous Decomposition Products</b>	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

### 11. TOXICOLOGICAL INFORMATION

#### Acute Toxicity

Product/Ingredient Name	Result	Species	Dose	Exposure
Hydrocarbons, C10-C12, isoalkanes, < 2% aromatics	LD50 Dermal	Rabbit	>5000 mg / kg	-
	LD50 Oral	Rat	>5000 mg / kg	-
	LD50 Inhalation	Rat	>5000 mg / kg	-

#### Potential Acute Health Effects

<b>Eye Contact</b>	May cause temporary eye irritation.
<b>Inhalation</b>	In high concentrations, vapours may irritate throat and respiratory system and cause coughing. In high concentrations, vapours are anaesthetic and may cause headache, fatigue, dizziness and central nervous system effects.
<b>Skin Contact</b>	Acts as a defatting agent on skin. May cause cracking of skin, and eczema.
<b>Ingestion</b>	Harmful: may cause lung damage if swallowed. Pneumonia may be the result if vomited material containing solvents reaches the lungs.

#### Symptoms Related to the Physical, Chemical and Toxicological Characteristics

<b>Eye Contact</b>	No specific data.
<b>Inhalation</b>	No specific data.
<b>Skin Contact</b>	Adverse symptoms may include the following: irritation, dryness, cracking
<b>Ingestion</b>	No specific data.

#### Potential Chronic Health Effects

<b>Conclusion/Summary</b>	Not available.
<b>General</b>	Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
<b>Carcinogenicity</b>	No known significant effects or critical hazards.
<b>Mutagenicity</b>	No known significant effects or critical hazards.
<b>Teratogenicity</b>	No known significant effects or critical hazards.
<b>Developmental Effects</b>	No known significant effects or critical hazards.
<b>Fertility Effects</b>	No known significant effects or critical hazards.

### 12. ECOLOGICAL INFORMATION

#### Acute Toxicity

Product/Ingredient Name	Result	Species	Dose	Exposure
Hydrocarbons, C10-C12,	LC50	Rainbow Trout	>1000 mg / l	96 hours

## Material Safety Data Sheet

isoalkanes, < 2% aromatics	EC50	Daphnia Magna	>1000 mg / l	48 hours
	EC50	Selenastrum Capricornutum	>1000 mg / l	72 hours

<b>Degradability</b>	The product is not biodegradable.
<b>Bioaccumulative Potential</b>	Substance is a UVCB. Standard tests for this endpoint are not appropriate.
<b>Mobility in Soil</b>	Substance is a UVCB. Standard tests for this endpoint are not appropriate.

### 13. DISPOSAL CONSIDERATIONS

Do not puncture or incinerate even when empty. Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.

<b>Material Disposal</b>	The generation of waste should be avoided or minimized wherever possible. Waste product residues should not be disposed of via the sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
<b>Container Disposal</b>	The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.  This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
<b>Local Legislation</b>	

### 14. TRANSPORT INFORMATION

<b>UN Number Road</b>	
<b>UN No. (IMDG)</b>	
<b>UN No. (ICAO)</b>	
<b>Proper Shipping Name</b>	HYDROCARBONS, LIQUID, N.O.S. (HYDROCARBONS, C11-C12, ISOALKANES, CYCLICS, <2% AROMATICS,

## Material Safety Data Sheet

	LIQUID)
ADR/RID/AND Class	
ADR Label No.	
IMDG Class	
ICAO Class/Division	
Transport Labels	
ADR/RID/ADN Packing group	
IMDG Packing group	
ICAO Packing group	
Environmentally Hazardous Substance/Marine Pollutant	
EMS	
Emergency Action Code	
Hazard No. (ADR)	
Tunnel Restriction Code	
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	

Transport within user's premises:

### 15. REGULATORY INFORMATION

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

<b>Statutory Instruments</b>	The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).
<b>The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).</b>	Classification and Labelling of Substances and Preparations Dangerous for Supply. Safety Data Sheets for Substances and Preparations. DSEAR
<b>Guidance Notes</b>	CHIP for everyone HSG(108).
<b>EU Legislation</b>	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.
<b>Chemical Safety Assessment</b>	A chemical safety assessment has been carried out.

### 16. OTHER INFORMATION

<b>SDS Version Number</b>	1.0.2
---------------------------	-------

## Material Safety Data Sheet

<b>SDS Effective Date</b>	2014-03-01
<b>SDS Revisions</b>	2
<b>SDS Distribution</b>	Lubrication Limited
<b>Disclaimer</b>	<p>To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.</p>